

In the Claims

1-25 (canceled).

26 (currently amended). A labeled angiogenesis inhibiting molecule comprising a label and an angiogenesis inhibiting molecule selected from:

- (a) the antibody H33, produced by hybridoma 13H33 as deposited with the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH under the deposit accession number DSM ACC2622, or antigen binding fragments thereof;
- (b) a humanized antibody ~~based on H33 and having the binding specificity~~ comprising all of the complementarity determining regions (CDRs) of the H33 antibody;
- (c) a chimeric antibody ~~based on H33 and having the binding specificity~~ comprising all of the CDRs of the H33 antibody;
- (d) a fragment of H33 selected from:
 - (i) a Fab fragment;
 - (ii) a Fv fragment; or
 - ~~(iii) a V_HS;~~
 - ~~(iv) (iii)~~ a scFv, a dimer of a scFv, a trimer of a scFv or a larger aggregate of a scFv; or
 - ~~(v) V_HH;~~
- (e) a recombinant antibody ~~having the binding specificity~~ comprising all of the CDRs of the H33 antibody; ~~or~~
- ~~(f) a human monoclonal antibody having the binding specificity of the H33 antibody.~~

27 (previously presented). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said labeled angiogenesis inhibiting molecule further comprises one or two non-

immunoglobulin moieties selected from cytokines, interleukins, hematopoietic factors, lymphokines, interferons, or chemokines.

28 (canceled).

29 (previously presented). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said labeled angiogenesis inhibiting molecule:

- a) blocks angiogenesis *in vitro* and *in vivo*;
- b) prevents tumor growth *in vivo*;
- c) reduces the recruitment of macrophages into tumors; and
- d) blocks the interaction of JAM-C with JAM-B.

30-41 (canceled).

42 (currently amended). A method of binding a labeled angiogenesis inhibiting molecule to JAM-C comprising contacting a sample, under conditions that allow for the binding of said labeled angiogenesis inhibiting molecule to JAM-C, with a composition comprising:

- (a) a labeled angiogenesis inhibiting molecule comprising a label and:
 - (i) the antibody H33, produced by hybridoma 13H33 as deposited with the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH under the deposit accession number DSM ACC2622, or antigen binding fragments thereof that have the binding specificity of the H33 antibody;
 - (ii) a humanized antibody ~~based on H33 and having the binding specificity comprising all of the CDRs~~ of the H33 antibody;
 - (iii) a chimeric antibody ~~based on H33 and having the binding specificity comprising all of the CDRs~~ of the H33 antibody;
 - (iv) a fragment of H33 selected from:
 - (A) a Fab fragment;
 - (B) a Fv fragment; or

~~(C)~~—a V_{H3} ;

~~(D C)~~ a scFv, a dimer of a scFv, a trimer of a scFv or a larger aggregate of a scFv; or

~~(E)~~— V_{H3} ;

(v) a recombinant antibody having the binding specificity comprising all of the CDRs of the H33 antibody; or

~~(vi)~~—~~a human monoclonal antibody having the binding specificity of the H33 antibody~~; and

(b) a suitable excipient, carrier or diluent.

43 (previously presented). The method according to claim 42, wherein said method further comprises the detection of the binding of JAM-C to said labeled angiogenesis inhibiting molecule.

44 (previously presented). The method according to claim 43, wherein said sample is a tissue sample, a body fluid sample or a cell sample.

45 (previously presented). The method according to claim 43, wherein said method is *ex vivo* or *in vitro*.

46 (previously presented). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is the antibody H33, produced by hybridoma 13H33 as deposited with the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH under the deposit accession number DSM ACC2622, or antigen binding fragments thereof.

47 (currently amended). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is a humanized antibody based on H33 and having the binding specificity comprising all of the CDRs of the H33 antibody.

48 (currently amended). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is a chimeric antibody ~~based on H33 and having the binding specificity comprising all of the CDRs~~ of the H33 antibody.

49 (currently amended). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is ~~an~~ a Fab fragment of H33.

50 (previously presented). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is a Fv fragment of H33.

51 (canceled).

52 (previously presented). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is a scFv, a dimer of a scFv, a trimer of a scFv or a larger aggregate of a scFv of H33.

53 (canceled).

54 (currently amended). The labeled angiogenesis inhibiting molecule according to claim 26, wherein said angiogenesis inhibiting molecule is ~~an~~ a recombinant antibody ~~having the binding specificity comprising all of the CDRs~~ of the H33 antibody.

55 (canceled).